

# DRAFT

## S-502B 4-Bay Spillway

**Revisions** 6 August 2000 - Original submission

**XY Coord** 841125 627835

**Location** On Griffin Road 1000 feet west of US27 southbound lanes

**Purpose** Maintain stage divide between northern and southern EBS.  
Controls C-11 Basin and Lake Okeechobee delivery flows directed south.

**Notes** 1. Riprap requirements have not been verified with Geotech.

### Design Conditions

Discharge (CFS)	2,500 cfs
Headwater Elevation	7.00 ft,NGVD
Tailwater Elevation	6.75 ft,NGVD

### Maximum Expected Stages

Headwater Elevation	9.00 ft,NGVD
Tailwater Elevation	8.75 ft,NGVD

### Maximum Head Difference

Maximum Headwater Elevation	7.50 ft,NGVD
Minimum Tailwater Elevation	6.50 ft,NGVD

### Crest Data

Shape	Ogee
Crest Elevation	-3.25 ft, NGVD
Ogee Length	14.8 feet
Net Crest Length	80.0 feet
Number and Width of Piers	3@3.25 feet
Approach Apron Elevation	-7.50 ft, NGVD
Approach Apron Width	89.75 feet
Approach Apron Length	10.25 feet

### Gate Data

Weir Control	Slide Gate
Number of Gates	4
Gate Bay Width	20.00 feet
Gate Height	14.40 feet
Gate Clearance Elevation	10.00 feet NGVD
Base of Breastwall Elevation	None

### Stilling Basin Data

Design Discharge	3,000 cfs
Apron Elevation	-8.50 ft,NGVD
Training Wall Elevation	8.75 ft,NGVD
Apron Length from Toe of Ogee to Toe of Endsill	27.75 feet
End Sill Elevation	-7.75 ft,NGVD
Slope from apron to Top of End Sill	1 on 5
Baffle Block Elevation	-7.00 ft,NGVD
Baffle Block Width	1.50 feet
Rows of Baffle Blocks	2
Distance from toe of Ogee to 1st Row of Baffle Blocks	12.85 feet
Distance from toe of Ogee to 2st Row of Baffle Blocks	17.15 feet

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#### Canal Data

Side Slopes Cotangent	1
Upstream Bottom Width	130.0 feet
Upstream Bottom Elevation	-8.00 ft,NGVD
Downstream Bottom Width	100.0 feet
Downstream Bottom Elevation	-10.00 ft,NGVD

#### Riprap Requirements

Design Endsill Velocity	2.35 fps
Design Riprap Velocity	4.00 fps
Riprap Protected Area	2,000 sq-ft
Riprap Thickness	1.5 feet
Riprap Bedding Thickness	1.0 feet

#### Control Protection Elevation

11.00 ft,NGVD